RYABOKON', N.K., inzhener; GUBERT, S.V., inzhener; VINOKUROV, I.Ya., inzhener; FEYGIN, G.D., inzhener.

Rolling of reduced-weight I-beams. Stal' 15 no.11:1000-1003 N '55. (MIRA 9:1)

1. Novo-Tagil'skiy metallurgicheskiy zavod.
(Rolling (Metal work)) (Steel, Structural)

FEYGIN, G.D.

SMIRNOV, V.D., inzhener; RYABOKON', N.K., inzhener; GUBERT, S.V., inzhener; VINOKUROV, I.Ya., inzhener; FEYGIN, G.D., inzhener.

Experience in rolling lightweight sections. Stal' 16 no.12:1086-1089 D '56. (MIRA 10:9)

1. Novo-Tagil'skiy metallurgicheskiy zavod.
(Rolling (Metalwork))

SOV/130-58-10-10/18

AUTHOR: Feygin, G.D. (Engineer)

TITLE: Service Experience with Rolling-Mill Rolls (Opyt ekspluatatsii prokatnykh valkov)

PERIODICAL: Metallurg, 1958, Nr.10, pp.29-32 (USSR)

ABSTRACT: Roll consumption has a significant effect on production costs. The author describes how the 1951 roll-consumption of 3.7 kg/ton of rolled product was reduced to 1.73 by 1957 in a rail-structural mill. This consists of a 900 mill of one reducing two-high reversing stand with rolls having a barrel length of 2300 mm, and an 800 mill consisting of two three-high (roughing and pre-finishing) and one two-high finishing stands with roll barrel lengths of 1900 and 1100 mm respectively. The author favours cast-iron rolls whose substitution for steel rolls has led to economies. He discusses the applications of iron rolls of varying hardness and describes the use of low-alloy magnesium inoculated cast-iron rolls. For steel rolls a special burner (Fig.1) has been regularly used for surface hardening since 1953 giving a 1.5-or 2-fold increase in

Card 1/2

Service Experience with Rolling-Mill Rolls.

roll life; the width of the most worn box passes is faced during renovation with 30KhGSA, type 08kp were being used for the build-up of the sides along a diameter. Metallization with PP3Kh2V8 wire is used for increasing the wear resistance of the working surfaces of box and shaped passes. Combined rolls with steel core inside shrunk-on cast-iron bands (Fig.4) have also been used. Rolls which are no longer suitable for a given stand are re-shaped for use in some other stand. Among changes made are the following: increase in the roll-diameter of the 900 mill from 960 to 1010 mm, increase in the radius of the fillets of the 800-mill rolls from 50 to 70 mm, better pass design, and remote control of cooling water flow. There are 5 figures.

AUTHORS: Feygin, G.D., Engineer SOV/133-58-7-24/27

TITLE: Remarks on the Paper of L.L. Zusman "On the Economic Effect of Production of Lightened Rolled Profiles (Otklik na stat'yu L.L. Zusmana "Ob ekonomicheskoy effektivnosti proizvodstva oblegchennykh profiley prokata")

PERIODICAL: Stal', 1958, Nr 7, pp 652 - 653 (USSR)

ABSTRACT: The original paper was published in Stal', 1956, Nr 12. The present author points out that economic effect of production of lightened profiles cannot be measured only by the economy in the consumption of metal. All other expenses involved in production such as a decrease in the output of the mill, an increase in the consumption of power and rolls, etc., should be considered. Examples are quoted indicating that instead of the expected saving, losses were incurred when rolling lightened profiles. In order to increase the production of this kind of profile, an increase in the output of rolling mills by a correct choice of optimum rolling conditions and an improvement in qualifications of rolling personnel should be obtained. There are 2 tables.

Card 1/1 1. Metals--Processing 2. Rolling mills--Performance 3. Industrial production--Costs

SOV/133-59-1-12/23

AUTHORS: Gubert, S.V., Merekin, B.V. and Feygin, G.D., Engineers

TITLE: An Experience in Rolling with Minus Tolerances (Opyt prokatki na minus)

PERIODICAL: Stal', 1959, Nr 1, pp 54 - 58 (USSR)

ABSTRACT: Measures taken at the above works to roll only with minus tolerances are described. It is pointed out that rolling with minus tolerances leads to an increase in the consumption of power and rolls and requires special attention from the rolling personnel. Therefore, to stimulate this type of rolling a bonus system for the economy of metal attained should be introduced.
There are 4 figures, 2 tables and 3 Soviet references.

ASSOCIATION: Nizhne-Tagil'skiy metallurgicheskiy kombinat
(Nizhniy Tagil Metallurgical Combine)

Card1/1

FEYGIN, G.D.; NEFED'YEV, N.G.

Special characteristics of rolling lightweight beam and channel shapes. Metallurg 5 no.2:26-27 F '60. (MIRA 13:5)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Rolling(Metalwork))

FEYGIN, Geshel' Davidovich; LEDNEV, M.P., retsenzent; KRYZHOVA, M.L., red. izd-va; TURKINA, Ye.D., tekhn. red.

[Organizing the storage and maintenance of iron mill rolls] Organizatsiia valkovogo khoziaistva. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii. Sverdlovskoe otd-nie, 1961. 118 p. (MIRA 14:7)

(Rolls (Iron mills))

MAKAYEV, Sergey Vladimirovich; VINOKUROV, Izrail Yakovlevich; MERKSIN, Boris Vasil'yevich; FEYGIN, Geshel' Davidovich; SKRYABIN, Nikolay Petrovich; RYABOKON', Nikolay Kononovich; LEDNEV, M.P., retsenzent; KOTSAR', Sergey Leonidovich, red.; BUR'KOV, M.M., red.izd-va; MAL'KOVA, N.T., tekhn. red.

[Production of lightweight sections]Proizvodstvo oblegchennykh profilei. [By]S.V.Makaev i dr. Sverdlovsk, Metallurgizdat, 1962. 215 p. (MIRA 16:3)
(Rolling (Metalwork))

SHALAYEV, Viktor Vasil'yevich; KALININ, Aleksandr Ivanovich; KOLBIN, Anatoliy Ivanovich; MEREKIN, Boris Vasil'yevich; FEYGIN, Geshel' Davidovich; VINOKUROV, Izrail Yakovlevich; SKAKUN, Vladimir Vasil'yevich; KAPUSTIN, Arkadiy Ivanovich; MOGILEVSKIY, David Markovich; ALEKSEYEVA, Tat'yana Alekseyevna; BABAYLOV, Finopent Ivanovich; SKRYABIN, N.P., red.; KRYZHOVA, M.L., red.izd-va; KOROL', V.P., tekhn. red.

[Improving procedures and equipment in shape rolling mills] Sovershenstvovanie tekhnologii i oborudovaniia v sortoprokatnom tsekhe. Sverdlovsk, Metallurgizdat, 1963. 163 p. (MIRA 16:1)

(Rolling (Metalwork))--Equipment and supplies)

FEYGIN, G.D.; GERMAN, I.M.; YAGODIN, L.I.

Durability of iron mill rolls. Metallurg 9 no.3:30-33 Mr '64.
(MIRA 17:3)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.

FEYGIN, G.I., inzhener.

Pumpless hydraulic transmission system for excavators. Mekh.stroi. 4 no.9:21-23 S '47. (MLRA 9:2)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut Stroydormash.
(Excavating machinery--Transmission devices)

FEYGIN, G.L.; DRUZHININ, V.P.

Operation costs for the maintenance of electric power supply systems are still very high. Elek.i tepl.tiaga 6 no.5:11-13 My '62. (MIRA 15:6)

1. Nachal'nik sluzhby elektrifikatsii i energeticheskogo khozyaystva Yuzhno-Ural'skoy dorogi (for Feygin). 2. Glavnyy inzh. sluzhby elektrifikatsii i energeticheskogo khozyaystva Yuzhno-Ural'skoy dorogi (for Druzhinin).
(Electric railroads—Current supply)

FEYGIN, G.Z.

Dynamics of the principal signs of physical development among female university students in Alma-Ata. Zdrav. Kazakh. 21 no.11:60-63 '61. (MIRA 15:7)

1. Iz kafedry fizicheskogo vospitaniya i vrachebnoy fizikul'tury Kazakhskogo meditsinskogo instituta.
(ANTHROPOMETRY)

FEYGIN, I. (Khar'kov)

Switching-in additional loudspeakers. Radio no.8:50 Ag '60.
(MIRA 13:9)

(Loudspeakers)

GORENBURG, I.O., inzh.; FEYGIN, I.A., inzh.

Reception of ultrashortwave radiobroadcasting stations. Trudy Sekt. radiofik. i VRS Ukr. NTORiE no.3:5-9 '56. (MIRA 12:1)
(Radio, Shortwave--Receivers and reception)

FEYGIN, Isaak Moiseyevich; SHAK'YAN, Yu.A., red.

[The slide rule] Logarifmicheskaia lineika. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1964. 100 p.
(MIRA 18:8)

YASHUNSKAYA, Felitsiya Iosifovna, kand. tekhn. nauk; FEYGIN, Il'ya Yefimovich, inzh.; BOGATOVA, V.N., red.; YURCHENKO, D.I., red.-leksikograf; AKSEL'ROD, I.Sh., tekhn. red.

English-Russian caoutchouc, rubber and chemical fibres dictionary. Anglo-russkii slovar' po kauchuku, rezine i khimicheskim voloknam. English-Russian caoutchouc, rubber and chemical fibres dictionary. Izd.3., perer. i dop. Moskva, Fizmatgiz, 1962. 260 p. (MIRA 16:6)

(Rubber--Dictionaries)
(Textile fibers, Synthetic--Dictionaries)
(English language--Dictionaries--Russian)

FEYGIN, Isaak Moiseyevich; SAAK'YAN, Yu.A., red.; IVANOVA, R.N., tekhn. red.

[Brief technical manual; solution of technical problems with a slide rule] Kratkii tekhnicheskii spravochnik; reshenie tekhnicheskikh zadach s pomoshch'iu logarifmicheskoi lineiki. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1961. 90 p. (MIRA 14:11)
(Slide rule) (Mechanical engineering—Tables, etc.)

ARKHANGEL'SKIY,A.S.; KREYNIN,A.V.; KUCHURIN,S.F.; MASTERITSYN,N.N.; SOKOLOV,P.G.; FEYGIN,I.Ya.; KHOKHLOV,L.P.; YANKINA,A.P.; KUCHURIN,S.F., redaktor; VERINA,G.P., tekhnicheskiy redaktor

[Rate book for railroad transportation] Spravochnik po tarifam zheleznodorozhnogo transporta. Moskva, Gos.transp. zhel-dor. izd-vo, 1955. 326 p. (MIRA 9:3)

(Railroads--Rates)

KOTIK, I.; ROGOV, V.; GROMOV, P.; FEYGIN, L.; SHCHERBAKOV, V.; ROGOVER, M.; BUTKEVICH, P.

Innovators of the Leningrad Metalworks to the 22d Congress of the CPSU. Mashinostroitel' no.9:30-32 S '61. (MIRA 14:10)
(Leningrad--Machinery industry--Technological innovations)

CHUDAKOV, K.P., kand. tekhn. nauk; VALOVA, L.S., inzh.; ALFEROVA, T.I., inzh.; ALFEROVA, Yu.A.; FEYGIN, L.; BONDAROVICH, B.A., inzh.; GONCHARENKO, V.T.

Prolong the life of excavators. Stroi. i dor. mash. 8 no.3: 8-14 Mr '63. (MIRA 18:5)

BR

ACCESSION NR: AP4033139 S/0120/64/000/002/0156/0160

AUTHOR: Feygin, L. A.; Mirenskiy, A. V.; Shny*rev, G. D.

TITLE: Precession chamber for photographing reciprocal lattice

SOURCE: Pribory* i tekhnika eksperimenta, no. 2, 1964, 156-160

TOPIC TAGS: crystal structure, atomic structure, reciprocal lattice, precession, precession chamber, x ray goniometer

ABSTRACT: An electric motor 1 (see Enclosure 1), via a wormgear and shaft 2 with an arc 3, imparts a precession motion to the crystal, holder, and screen. Slider 4 is connected by spindle 5 with buckle 6. The precession angle may be adjusted by setting the slider. Spindle 5 can rotate in the buckle-6 bushing, to which the x-ray-film holder is fastened. The buckle is tilted through the precession angle about the XX and YY axes. Test crystal 7 is placed in a goniometric head at the intersection of X, X_1 and Y, Y_1 axes. Crystal holder 8 is also

Card 1/3

ACCESSION NR: AP4033139

tilting about the X, X_1 and Y, Y_1 axes. The construction of the precession chamber is described in some detail (pictorial sketch supplied). Precession x-ray pictures of two amino-acids — phenylalanine and proline — are shown. Orig. art. has: 4 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography, AN SSSR)

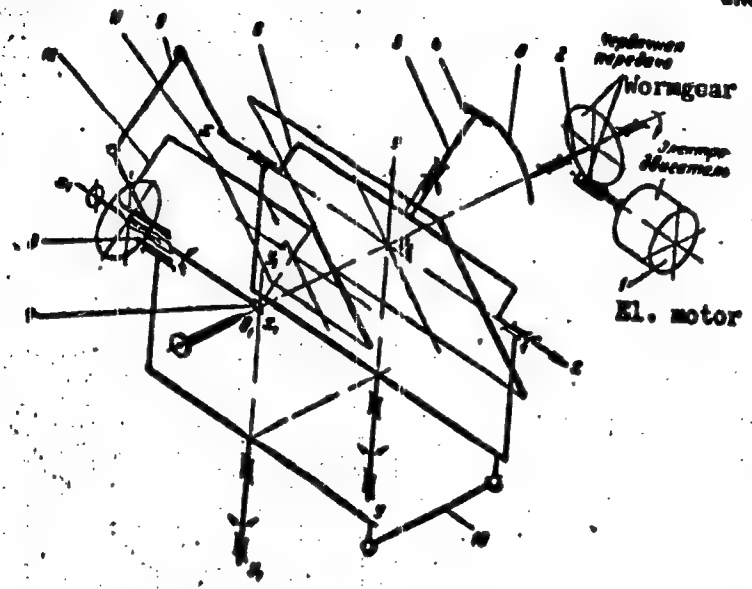
SUBMITTED: 13Apr63 DATE ACQ: 11May64 ENCL: 01

SUB CODE: SS NO REF SOV: 002 OTHER: 001

Card 2/3

ACCESSION NR: AP4033139

ENCLOSURE: 1



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Kinematic scheme of the precession chamber

FEYGIN, L.A.

GRIGORENKO, Mikhail Grigor'yevich; KASIMOV, S.A.; KOZLOVSKIY, G.B.; MARTYNOV, N.V.; MUSTAFIN, G.A.; NEMIROVSKIY, Ya.I.; FEYGIN, L.A.; KRIMERMAN, M.N., inzhener, redaktor; MAL'KOVA, N.V., tekhnicheskiy redaktor

[Road building machinery] Dorozhnye mashiny. Moskva, Avtotransizat Ministerstva avtomobil'nogo transporta i shosseinykh dorog SSSR. Pt. 2. 1954. 283 p. (MLRA 8:2)
(Road machinery)

GRIGORENKO,M.G.; KOZLOVSKIY, G.B.; MUSTAFIN, G.A.; FEYGIN, L.A.; SHIKALOV, A.G.; PETERSA, Ye.R., kandidat tekhicheskikh nauk, redaktor; FAYNBERG, G.M., inzhener, redaktor.

[Road machinery] Doroshnye mashiny. Pod obshei red. E.R.Petersa i G.M. Faynberga. Moskva, Ministerstva avtomobil'nogo transporta i shosseinykh dorog SSSR. Pt.1. 1954.366 p. (Microfilm) (MLRA 9:6)
(Road machinery)

NEYGIN, Leonid Aleksandrovich. YAKOVLEV, Yuriy Mikhaylovich; MER, I.I., redaktor; AVRUSHENKO, P.A., redaktor izdatel'stva; KONYASHINA, A.D., tekhnicheskiy redaktor

[Machines and equipment for the construction and operation of city streets] Mashiny i oborudovanie dlia stroitel'stva i ekspluatatsii gorodskikh putei sooobshcheniia. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR, 1956. 369 p. (MIRA 10:1)
(Road machinery)

FEYGIN, L.A.

122-5-6/35

AUTHORS: Bogdanov, N.V. and Feygin, L.A. (Engineers)

TITLE: The Running-in of High Power Gear Transmission by the Closed Contour Method (Obkatka peredach bol'shoy moshchnosti zamknutym metodom)

PERIODICAL: Vestnik Mashinostroyeniya, 1957, Nr 5, pp.15-17 (USSR)

ABSTRACT: The Leningrad Metal Plant (Leningradskiy Metallicheskiy Zavod) introduced closed contour gear transmission testing and running-in in 1951. A diagram of the closed contour rig is shown, including several gear couplings which enabled the shafts to work with a certain angularity. This is used to produce a pulsating torque through a system of differential bearing loads. The analysis of V.N. Kudryavtsev (Vestnik Mashinostroyeniya 10, 1951) is recalled. Some early technical troubles resulting in pitting of tooth flanks are mentioned and the large economy possible with the closed contour tests is noted. There are 3 illustrations, including 2 photographs, and 1 table.

AVAILABLE: Library of Congress.

Card 1/1

LESIN, Aleksandr Sergeyevich; FEYGIN, Leonid Aleksandrovich; KRAMARENKO, G.V., kand.tekhn.nauk, retsenzent; KORNEICHEV, N.V., inzh., retsenzent; YERETSKIY, M.I., inzh., red.; ZUYEVA, N.K., tekhn.red.

[Practical laboratory work in automobile maintenance] Laboratornyi praktikum po tekhnicheskomu obsluzhivaniiu avtomobilei. Moskva, Nauchno-tekhn.izd-vo avtotransp. lit-ry, 1958. 119 p. (MIRA 12:3)

(Automobiles--Maintenance and repair)

FEYGIN, L.A.; YAKOVLEV, Yu.M.; YERETSKIY, M.I.; VISHNEPOL'SKIY, A.M.; STANKOVSKIY, A.P., dotsent, nauchnyy red.; KROMOSHCH, I.L., red.izd-va; RUDAKOVA, N.I., tekhn.red.

[Using building machinery and equipment] Ekspluatatsiia stroitel'nykh mashin i oborudovaniia. Moskva, Gos.izd-vo lit-ry po stroitel'stvu, arkhit. i stroit.materialam, 1960. 257 p. (MIRA 14:4)

(Building machinery)

CHUDAKOV, Konstantin Petrovich; FEYGIN, Leonid Aleksandrovich; PETROV, Il'ya Vladimirovich; TEMIROV, Yuriy Sergeyevich; PEREVALYUK, M.V., red.izd-va; SHERSTNEVA, N.V., tekhn.red.

[Maintenance of construction machinery] Tekhnicheskoe obsluzhivanie stroitel'nykh mashin. [By] K.P.Chudakov i dr. Moskva, Gosstroiizdat, 1963. 259 p. (MIRA 16:12)
(Construction equipment--Maintenance and repair)

FEYGIN, Leonid Aleksandrovich; STANKOVSKIY, A.P., inzh., nauchn. red.; PEREVALYUK, M.V., red.

[Operating construction equipment and increasing its efficiency] Ekspluatatsiia stroitel'nykh mashin i povyshenie ikh proizvoditel'nosti. Moskva, Stroiizdat, 1964. 206 p. (MIRA 17:6)

FEYKER, D.M.; FEYGIN, L.A.; YAFOVICH, I.T.

Small-angle X-ray diffractometer with asymmetrical focusing monochromator. Kristallografiia 10 no.3:447-449 My-Je '65.
(MIRA 18:7)

1. Institut kristallografii AN SSSR i Nauchno-issledovatel'skiy institut asbesta, slyudy, asbestotsementnykh izdeliy i proyektirovaniya stroitel'stva predpriyatiy slyudyanoy promyshlennosti.

DEMEO, A.T.; DOBROV, Ye.N.; LEDNEV, V.V.; TIKHONENKO, T.I.; FEYGIN, L.A.

DNA packing inside the heads of bacteriophages D_7, T_2, and S_d. Biofizika 10 no.3:404-407 '65. (MIRA 18:11)

1. Institut kristallografii AN SSSR, Moskva i Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva. Submitted Oct. 10, 1964.

FEYGIN, Leonid Aleksandrovich; YAKUSHKIN, Georgiy Mikhaylovich [deceased]; KROMOSHCH, I.L., nauchn. red.; NAZARENKO, M.I., red.

[Work training of the operators of bulldozers, graders and scrapers] Proizvodstvennoe obuchenie mashinistov bul'dozerov, greiderov i skreperov. Moskva, Vysshaia shkola, 1965. 146 p. (MIRA 19:1)

Aqueous colloidal graphite preparations made by vibratory grinding. L. A. Feigin. *Khim. Nauka i Prom.* 1, 210-12(1956).—The graphite is 1st ground dry in a vibratory mill until an av. surface area of about 600 sq.m./g. (measured by adsorption of N) is reached. The grinding is continued in a vibratory mill contg. high Al_2O_3-ceramic spheres in the presence of a surface-active material (such as 20–30% sulfite liquor and 15–20% Leitkanol, based on graphite) until 95–100% of the particles are smaller than 2 μ when measured by sedimentation rate. J. H. Scott

FEYGIN, L.A.

Category : USSR/Atomic and Molecular Physics -- Low Temperature Physics D-5

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6358

Author : Feygin, L.A., Shel'nikov, A.I.
Inst : Moscow State University, USSR
Title : On the Value of the Critical Current in Thin Layers of Superconductors.

Orig Pub : Dokl. AN SSSR, 1956, 108, No 5, 823-844

Abstract : Tin films $2,1 \times 10^{-5}$ -- 3.4×10^{-6} cm thick were deposited by condensation on the entire periphery of glass cylinders approximately 0.5 mm in diameter under high vacuum at room temperature. The tin layer is made thicker at the ends of the cylinders, and contact with conducting leads is made by pressing the cylinders against a brass holder. The specific resistivity of the films at room temperature was close to the value of ρ for bulk tin. The cylindrical form of the films made it possible to determine uniquely the values of the magnetic field H, corresponding to the currents I carried. It was found that the transition to the normal state occurs,

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Corres. Mbr. AS USSR

FEYGIN, L.A.

AUTHOR FEYGIN L.A., ROZHANSKIY V.N. 20-5-44/67

TITLE On the Complete X-Ray Investigation of the Dispersion of Graphite Powders and Colloid Preparations.
(O vozmozhnosti polnogo rentgenograficheskogo dispersionnogo analiza grafitovykh poroshkov i kolloidnykh preparatov -Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 5, pp 1102-1105 (U.S.S.R.)

Received 7/1957 Reviewed 8/1957

ABSTRACT The radiographic methods of measuring dispersion states of solids have been developed in the course of the past 30 years. In this connection only the average sizes of the monocrystal grain was usually taken into account, and the so-called "breadth" of the diffraction line was taken as a basis. In recent years the possibility of finding the distribution function of the crystallite size by the examination of the shape of the diffraction line of the X-Ray picture of the powder was proved. This method is based upon the harmonic analysis of the intensity of diffraction reflection and makes it possible to estimate the amount of stress and the measurements of the grain separately for crystals of any symmetry. If microstresses are lacking, the intensity I ( ) of the reflection hkl can be represented as the Fourier integral:

$I(\ ) = \int h(n)\, e^{2\pi i n (\ )}\, dn$, where n is the parameter which is linearly connected with the size of the grain; -the diffraction angle, and -a variable in the negative space. By the relation of the

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function h (n) with the grain distribution curve g(M) the authors, by differentiation of the equation (2),obtain the expression $\frac{dh}{dn} = K \int_n g(M)dM$; $\frac{d^2h}{d^2n} = Kg(n)$, i.e. the first derivative dh/dn, results in an integral function, whilst the second d^2h/d^2n - denotes the differential function of the distribution.Thus, a detailed description of the dispersional composition of the sample is obtained. The investigation of various reflections makes it possible to study also the shape of various crystallites. However, the practical application of this method meets with considerable difficulties. It may be assumed that in the case of brittle substances there is no washing out of lines as a result of microstresses,which fact facilitates the investigation of the composition of dispersion considerably.The authors endeavored to find the dispersion function according to the size of particles in highly dispersed graphite systems; this problem attained actual importance in connection with the introduction of new kinds of colloidal graphite preparations in practice, which are produces by mechanical dispersion in a vibration mill. By means of a special process particles of greatly differing sizes were obtained. After 3o hours graphite becomes soot-like and is heated in air up to 7oo°.The determination of the true shape of the line was carried out according to Stokes'method.

On the Complete X-Ray Investigation of the Dispersion of Graphite Powders and Colloid Preparations. 20-5-44/67

The dependence curves of the Fourier coefficients of parameter n were found to be approximated to the theoretical curves in the case of lacking stresses. In order to find the integral function it is sufficient to differentiate the experimentally found function h(n) although the accuracy attained cannot be very high. From the experimental curve h(x), and x and x^2 are easily found (average size and average square of size). From the relations mentioned the medians and the dispersion σ are then determined. The curves h(n) computed according to these parameters coincided satisfactorily with experimental results. This may be taken to be a confirmation of the possibility of applying the logarithmically normal law for the description of the distribution according to size of the graphite particles. The determination of the specific surface according to nitrogen absorption at low temperatures according to Brunnarer, Emmet, and Teller agrees satisfactorily with radiographic results. This is apparently a sign that in the samples of the authors the domains of coherent dispersion coincide with the graphite particles, the sizes of which are determined according to the adsorption of nitrogen vapors.
(With 3 illustrations, 3 Slavic references).

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On the Complete x-Ray Investigation of the Dispersion— —
of Graphite Powders and Colloid Preparations. 20-5-44/67

ASSOCIATION All Union Central Scientific Research Institute for New Problems connected with the Production of Building Material by fine Crushing.

PRESENTED BY

SUBMITTED 17.1o.1956

AVAILABLE Library of Congress

Card 4/4

Feygin, L.A.

20-5-26/54

AUTHORS: Feygin, L.A., and Rozhanskiy, V. N.

TITLE: The Influence of Adsorption Layers on the Dispersion of Graphite (O vliyanii adsorbtsionnykh sloyev na dispergirovaniye grafita)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 5, pp. 946-948 (USSR)

ABSTRACT: The problems of the physical-chemical influence exercised upon the processes mentioned in the title have as yet been quite insufficiently investigated. They are mainly connected with the difficulties of dispersion analysis within the domain of the colloidal size of the particles. In the present work the authors measured the specific suface by the method of low temperature nitrogen adsorption, and further, they employed the radiographical method previously used by them as well as investigation under the electron microscope. The vibration crushing of graphite makes it possible to produce highly dispersive preparations of colloidal graphite. The average size of the primary particles is 100 Å and less. The specific surface here attains 600 m^2/g. This method of crushing is 10 - 20 times more intense than in an aqueous medium. Such a high state of dispersion

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The Influence of Adsorption Layers on the Dispersion of Graphite

should naturally be brought into connection with the strata-like structure of the graphite lattice. The radiographical and electron-microscopical investigations confirm this, for the graphite particles turn out to be little scales the sizes of the base of which considerably exceeds their heighth. In order to be able to explain the dispersion mechanism in graphite small quantities of water as well as of other substances were introduced during the grinding process. It was found that in a vibration mill a rather low average pressure is produced because the dispersion process on the whole develops at the cost of surface crushing of the particles on the occasion of their relative displacement. The frictional force between the particles therefore in a high degree determines the degree of crushing. Figure 2 shows the curves of the dependence of the increase of the specific graphite surface on the time needed for crushing in the case of different additions of water. Herefrom it is seen that the dispersion of dry graphite is the most intense: the specific suface increases with a constant velocity of 30 m^2/g min. up to a value of 300 m^2/g. On the other hand, the increase of the specific surface increases about ten times more slowly in the case of additions of water of the order of 3 %.

20-5-26/54

The Influence of Adsorption Layers on the Dispersion of Graphite

Knowledge of the true value of the specific surface made it possible to calculate the number of saturated monolayers of water which are formed on the surface of the graphite particles if the powder is dispersed with a certain quantity of water. The change of the velocity of the increase of the graphite surface takes place with a content of water that corresponds to the formation of a saturated monolayer. This circumstance is due to the abrupt increase of the friction coefficient of the pure newly formed graphite particle in comparison to the friction of the graphite surfaces covered with adsorption water. The kinetics of dispersion is explained in the following manner: Even the smallest additions of water warrant a sufficient number of layers of adsorbed liquid. With an increasing surface the number of water layer diminishes, until, finally, the number becomes less than what is necessary for the formations of a monolayer. Grinding velocity then becomes nearly equal to that of "dry" crushing. It may be seen from the experiments that the small quantities of water or of other substances always found on the exterior layer of the initial graphite sample are able to influence the dispersion process only during its

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The Influence of Adsorption Layers on the Dispersion of Graphite

initial stages because, during vibration crushing, the specific surface is increased a hundred- and even a thousand times. Admixtures in graphite will therefore have only a low surface density on the course of the crushing process. This was checked and proved. Figure 3 shows the kinetics of crushing in the case of additions of small quantities of butyl alcohol, the curves of which take the same course as in the case of water. The same is confirmed qualitatively on the occasion of the introduction of benzene vapor. Further, water was added in the case of natural graphite, artificial graphite made of anthracite, and on the occasion of the crushing of mica. In the case of mica additions of water increase the velocity of crushing. There are 3 figures, 1 table, and 8 Slavic references.

20-5-26/54

The Influence of Adsorption Layers on the Dispersion of Graphite

ASSOCIATION: All-Union Institute for New Problems Connected with the Production of Building Material
(Vsesoyuznyy institut novykh problem proizvodstva stroitel'nykh materialov)
Chair for Colloidal Chemistry at the State University of Moscow
(i Kafedra kolloidnoy khimii Moskovskogo gosudarstvennogo universiteta)

PRESENTED: by P.A. Rebinder, Academician, March 14, 1957

SUBMITTED: March 2, 1957

AVAILABLE: Library of Congress

Card 5/5

FEYGIN,L.A., Cand Phys-Math Sci -- (diss) "Roentgenographic study of the fine dispersion of graphite, and the effect of adsorbtion on this process." Mos, 1958. 11 pp (Inst of Physical Chemistry of the Acad Sci USSR), 100 copies (KL,43-58, 114)

SOV/20-127-2-22/70

24(2)
AUTHOR: Feygin, L. A.

TITLE: On the Deformations of the Graphite Lattice During the Process of Mechanical Dispersion

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 313-315 (USSR)

ABSTRACT: It is to be investigated to which extent the amorphous graphite structure can be realized by mechanical dispersion of graphite. Graphite is pulverized by vibrating and the degree of pulverization determined radiographically. The Ni K_{α}-emission is used for this purpose, after monochromatizing by reflexion on pentaerythrite. As an example two radiographs (Fig 1) of the initial and the powdered graphite are shown. The curve of the dispersion intensity of the X-ray on a mechanically dispersed graphite sample is given in figure 2 and discussed in detail. A comparison between this curve and corresponding curves of active carbon and carbon black shows essential features. A detailed discussion is also given of the three maxima in this ourve. The dimensions of the structural grain are estimated from the half width of the individual maxima and their widening. Furthermore, it follows from the specific

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On the Deformations of the Graphite Lattice During the Process of Mechanical Dispersion

surface area, which is given as 250 m^2/g, that the graphite particles have an average size of 120 Å, whereas the sizes of structural grains range from 10 to 25 Å. Finally, it is stated that it is possible to obtain graphite with particle sizes in the magnitude of carbon and black particles. The author thanks P. A. Rebinder and V. N. Rozhanskiy for taking a constant interest in the investigation and for their criticism of the results. There are 2 figures and 10 references, 3 of which are Soviet.

ASSOCIATION: Institut novykh problem proizvodstva stroitel'nykh materialov na baze tonkogo izmel'cheniya Akademii stroitel'stva i arkhitektury SSSR (Institute for New Problems of Production of Building Materials on the Basis of Fine Pulverization of the Academy for Building and Architecture, USSR)

PRESENTED: October 14, 1958, by P. A. Rebinder, Academician

SUBMITTED: October 6, 1958

~~5(4)~~ 15.6100

66189

AUTHORS: Feygin, L. A., Davidovskaya, I. B. SOV/20-128-5-43/67

TITLE: On the Scientific Fundamentals of the Preparation of Colloidal Graphite Lubricants

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 5, pp 1012 - 1015 (USSR)

ABSTRACT: The applications of these lubricants are recalled in the introduction. The following problems have to be met with in their production: graphite dispersion with a degree of maximum fineness; production of aggregate-stable preparations containing minimum quantities of detrimental admixtures deteriorating the antifriction properties of the preparation. The technological schemes so far suggested are criticized for being complicated and requiring too many working processes (Refs 1-3). Also, they do not guarantee the lubricity of the preparations. It was not until P. A. Rebinder and his school (Refs 4,5) investigated these problems that a new attempt was made to approach this problem. Several difficulties arise in finely dispersing graphite in connection with processing it to heat-resistant lubricants (Refs 6-8). The authors dispersed graphite in water and organic substances in airtight cylinders in an eccentric laboratory vibrational mill

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On the Scientific Fundamentals of the Preparation of Colloidal Graphite Lubricants SOV/20-128-5-43/67

(Ref 9). It appeared that the surface concentration of the substance on the graphite, C_s mg/m^2 (Fig 1), determines the parameter of pulverization kinetics. The dispersion rate doubles as compared with a surface of maximum purity (C_s=0) with a value of C_s=0.06 mg/m^2, i.e. with a relative filling of one-fourth of the monomolecular layer. The ratio of humidity to the surface extension of graphite rather than the humidity content is of importance. The surface extension increases in dispersion. The authors describe the disintegration process of the graphite crystals and the effect of adsorbed vapor on the crystal face. These adsorption layers promote graphite dispersion along the basic face. The following preparation scheme for graphite lubricants is suggested on account of the results obtained: A certain quantity of water (or an aqueous solution of surface-active substances) roughly corresponding to the formation of a saturated monomolecular water layer is gradually added with the increase of specific surface. A C_s-value amounting to somewhat

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66189

On the Scientific Fundamentals of the Preparation of Colloidal Graphite Lubricants SOV/20-128-5-43/67

less than 0.26 mg/m^2 is required for highly disperse preparations. The second and last process is the introduction of a corresponding quantity of e.g. the residual sulphite-spirit spent wash. The authors simultaneously solved two technological problems: They achieved (1) radical simplification of the technological scheme of producing colloidal graphite preparations, and (2) considerable improvement in the lubricity of these preparations. P. A. Rebinder, Academician, and V. N. Rozhanskiy participated in the discussion of the results. There are 1 figure and 11 Soviet references.

ASSOCIATION: Akademiya stroitel'stva i arkhitektury SSSR (Academy of Construction and Architecture, USSR)

PRESENTED: May 22, 1959, by P. A. Rebinder, Academician

SUBMITTED: May 20, 1959

Card 3/3

FEYGIN, L A.

57

PHASE I BOOK EXPLOITATION SOV/5460

Leningradskiy metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Nekotoryye voprosy tekhnologii proizvodstva turbin (Certain Problems in the Manufacture of Turbines) Moscow, Mashgiz, 1960. 398 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 2,100 copies printed.

Sponsoring Agency: RSFSR. Sovet narodnogo khozyaystva Leningradskogo ekonomicheskogo administrativnogo rayona, Upravleniye tyazhelogo mashinostroyeniya, and Leningradskiy dvazhdy ordena Lenina metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Ed. (Title page): G. A. Drobilko; Editorial Board: Resp. Ed.: G. A. Drobilko, B. A. Glebov, A. M. Mayzel', and M. Kh. Mernik; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on Machine-Building Technology: Ye. P. Naumov, Engineer, Leningrad Department, Mashgiz.

PURPOSE: This collection of articles is intended for technical personnel in turbine plants, institutes, planning organizations, as well as for production innovators.

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Certain Problems (Cont.) SOV/5460

COVERAGE: The experience of the LMZ (Leningradskiy metallicheskiy zavod - Leningrad Metalworking Plant) in the manufacture of modern large-capacity turbines is presented. Methods for the rationalization of basic manufacturing processes and for the mechanization and automation of manual operations are given. Descriptions of attachments and tools designed by LMZ for improving labor productivity and product quality are provided, and advanced inspection methods discussed. References accompany some articles. No personalities are mentioned. There are 26 references: 25 Soviet and 1 English.

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Gamze, Z. M. [Engineer]. The Organization, Methods, and Trends in Efforts for Improving the Easy Manufacturability of Designs for Large Hydraulic Turbines 5

Card 2/12

Certain Problems (Cont.)

Gonserovskaya, T. S. [Engineer]. The Welding of Turbine-Wheel Blade Packs and Nozzle Segments Made of Type 15Kh11MF Steel 254

Gonserovskiy, F. G. [Engineer]. The Effect of Process Factors on the Quality of Austenitic [Steel] Welds 261

Kochergin, A. K. [Engineer]. Resistance Spot Welding of Metal Constructions 275

Pachin, V. Kh. [Engineer], and G. M. Pevzner [Engineer]. The Production of Parts by the Investment Casting Method 278

Turovskiy, A. I. [Engineer]. Electric Heat-Treating Furnaces Designed by LMZ [Leningradskiy metallicheskiy Zavod - Leningrad Metalworking Plant] 286

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Butkevich, P. I. [Engineer], and G. A. Sazonov. Iron Plating

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Dyatlov, V. G. [Engineer]. Equipment for the Roll-Forming of [Lagging] Straps 359

Bol'shakov, B. A. The Replacement of Wooden Tracers by Cement Ones and by Rotary [Indexing] Devices 362

Pisarevskiy, M. M. [Candidate of Technical Sciences], and A. F. Yerashov [Engineer]. Magnetic Holders for Small Instruments and Parts 366

Dolzin, L. I. [Engineer]. A High-Efficiency Method for Grinding Complex-Shaped Master Forms 369

Sazonov, G. A. Practice in Using the BTO-1 "Fogless" Spray Gun 374

VI. PRODUCTION CONTROL

FEYGIN, L.A.

Use of X-rays in the research on materials. Vest. AN SSSR 31 no.10:128-129 O '61. (MIRA 14:9)
(X-rays--Industrial applications)

L 53750-65 EWG(j)/EWP(e)/EWT(m)/EPF(c)/EWP(t)/EPR/EWP(b) Pr-4/Ps-4
WW/WH UR/0020/65/161/002/0395/0398
ACCESSION NR: AP5010170

34
32
B

AUTHOR: Plavnik, G. M.; Feygin, L. A.

TITLE: Using the method of small-angle X-ray scattering to investigate the disperse structure of finely pulverized graphite 15

SOURCE: AN SSSR. Doklady, v. 161, no. 2, 1965, 395-398

TOPIC TAGS: X ray scattering, small angle X ray, disperse structure, graphite structure, collimator, polydispersity, adsorption, particle shape

ABSTRACT: The analysis of X-ray scattering in the small-angle region, i.e., in the immediate neighborhood of the primary beam, is a highly promising method of investigating the structure of high-disperse graphite preparations. This method combines in itself the advantages of both the adsorption and the X-ray (wide-angle) methods and makes it possible to simultaneously determine all the principal features of disperse systems -- unit surface area, mean dimensions and shape of particles, degree of polydispersity. The authors investigated specimens of natural Taygiuka graphite pulverized for 1, 3, 10, and 26 hr. Weighed portions of the

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L 53758-65
ACCESSION NR: AP5010170

powder were poured into cuvettes with windows covered by a thin (20 μ) polymer film translucent with respect to X-rays. The intensity of small-angle X-ray scattering was measured in a specially designed setup with five-slit optics (three collimator slits and two receiving slits) adapted to the range of scattering angles from 1' to 5°. It was found that as the dispersion time increases the intensity of small-angle scattering sharply increases. The shape of the scattering particles can be determined from the nature of the scattering curves. The longer the pulverization time the steeper is the "main part" of the curves (the region of the smallest angles). Such a course of the curves indicates a lamellar shape of the scattering particles, as confirmed by electronmicroscopic data. Thus, the dispersion of graphitic materials is accompanied by the formation of extremely minute ($R_{inertia}$ = 35-50 Å) flat particles characterized by a high degree of polydispersity ($q \simeq 1$). In this connection, the surface area reaches several hundred square meters per gram. Thus, the method of small-angle scattering of X-rays makes it possible to obtain a sufficiently complete picture of the disperse structure of colloidal systems and, in many cases, provides information normally obtainable only with the aid of two methods -- adsorption and X-ray wide-angle

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L 53750-65
ACCESSION NR: AP5010170

2

diffraction. Orig. art. has: 2 figures, 1 table, 3 formulas.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences SSSR); Institut kristallografii Akademii Nauk SSSR (Institute of Crystallography, Academy of Sciences SSSR)

SUBMITTED: 19Aug64 ENC: 00 SUB CODE: MT, OP

NO REF SOV: 006 OTHER: 005

Card 1/3

VAYNSHTEYN, B.K.; FEYGIN, L.A.

Ordered arrangement of the molecules of soluble ribonucleic acid in water solutions. Dokl. AN SSSR 161 no.6:1444-1447 Ap '65. (MIRA 18:5)

1. Institut kristallografii AN SSSR. 2. Chlen-korrespondent AN SSSR (for Vaynshteyn).

KRYUCHKOV, Ya.S., inzh.; FEYGIN, L.D., inzh.; SHATROV, A.I., inzh.

Net charts for the construction of an automatic blooming mill.
Prom.stroi. 42 no.2:2-6 '65. (MIRA 18:4)

PUTSILLO, V.P. (Moskva); STRAKHOV, V.P. (Moskva); FEYGIN, L.I. (Moskva)

Use of a nonlinear programing method for solving a problem on the optimum transportation of metal to a blooming mill. Avtom.i telem. 23 no.8:1067-1077 Ag '62. (MIRA 15:7)
(Rolling (Metalwork)) (Automatic control)

FEYGIN, L.I. (Moskva)

Multioperational systems and finite automata. Izv. AN SSSR. Tekh. kib. no.4:56-59 Jl-Ag '63. (MIRA 16:11)

FEYGIN, L.I. (Moskva)

Feasibility of processing objects by several machines.
Izv. AN SSSR Tekh. kib. no.2:24-29 Mr-Ap'64. (MIRA 17:5)

ACC NR: AP7007581 SOURCE CODE: UR/0118/66/000/009/0044/0046

AUTHOR: Kopelovich, A. P. (Engineer); Rayevich, S. K. (Engineer); Rapoport, V. N. (Engineer); Feygin, L. I. (Engineer)

ORG: none

TITLE: Usage of network methods for planning and control

SOURCE: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 9, 1966, 44-46

TOPIC TAGS: control theory, automatic control design

SUB CODE: 13

ABSTRACT: A review of network planning and control methods (PERT-based) is presented. An improvement in standard network diagrams, in the form of lines dividing the graph into equal time periods, is presented. This improvement allows the actual reserve of time for each individual operation to be determined. Some general rules for application of network planning diagrams, such as insistance on written reports and avoidance of telephone reports, frequency of progress meetings, etc., are presented. Orig. art. has: 1 figure. [JPRS: 39,779]

Card 1/1 UDC: 65.012.122

BARSUKOV, Fedor Aleksandrovich; RACHKOVSKIY, Solomon Yakovlevich; NAGIBIN, Pavel Vasil'yevich, kand.ekon.nauk, retsenzent; VERMEY, Yelena Nikolayevna, retsenzent; FEYGIN, Lazar' Moiseyevich, otv. red.

[Economic efficiency of capital investments in iron mining] Ekonomicheskaia effektivnost' kapital'nykh vlozhenii v zhelezorudnuiu promyshlennost'. Moskva, Izd-vo "Nedra," 1964. 110 p. (MIRA 17:5)

SHETLER, G.A.; FEYGIN, L.M.; ZINCHENKO, Ye.M.

[Album on drilling and blasting] Al'bom po buro-vzryvnym rabotam. Moskva, Ugletekhizdat, 1953. 93 p. (MLRA 7:1)
(Boring) (Blasting) (Explosives)

FEYGIN, L., inshener.

F.I.Beznosenko's blast-hole driller. Mast.ugl. 2 no.10:19-20 O '53.
(MLRA 6:10)
(Rock drills)

FUYGIN, Lev Mikhaylovich; SHETLER, Georgiy Arvidovich; SOSNOV, V.D., redaktor; SLAVOROSOV, A.Kh., redaktor; PROZOROVSKAYA, V.L., tekhnicheskiy redaktor; ALADOVA, Ye.I., tekhnicheskiy redaktor

[Driller] Buril'shchik. Moskva, Ugletekhizdat, 1955. 215 p.
(Boring machinery) (Coal mining machinery) (MLRA 8:7)

[M-]

FEYGIN, L. inzhener; CHEREMNYKH, M. inzhener

New bits for the rotary drilling of large diameter boreholes.
Mast.ugl. 4 no.5:20-22 My '55. (MLRA 8:7)
(Boring machinery)

MINDELI, E.O., kand. tekhn. nauk; FEYGIN, L.M., inzh.

Flameless blasting in coal mines abroad. Bezop. truda v prom. 1 no.12:27-30 D '57. (MIRA 12:3)
(Coal mines and mining) (Blasting)

AUTHOR: Feygin, L.M. 32-12-51/71

TITLE: Devices for a Rapid Toughness and Hardness Test of Metals at Temperatures of from 900 to 1300° (Prisposobleniya dlya kratkovremennykh ispytaniy na rastyazheniye i tverdost' metallov pri temperaturakh 900-1300°).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1514-1515 (USSR)

ABSTRACT: In this paper a new additional device to be used in conjunction with the universal testing machine of the firm of "Mohr & Federhaff" with a lever-pendulum dynamometer intended for a maximum stress of 3000 kg is recommended. A reducer is attached to the movable part of the machine, which serves the purpose of recording the extension curves instead of the diagram apparatus. This additional device is constructed according to the following principle: The motion caused by extension of the sample is three-fold reduced transmitted by the transmission from a toothed rail and two toothed wheels of unequal size (on a shaft) on to the second rail. This reduced motion is here recorded by the attached writing device. It is therefore the purpose of the additional device to make it possible easily to measure the greater extension moment of the sample existing at high temperatures

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Devices for a Rapid Toughness and Hardness Test of Metals at Temperatures of from 900 to 1300° 32-12-51/71

(up to 60 mm). The second device recommended here is intended for the testing of samples with respect to compression stress. It consists of an extended test rod device, in which, beside the sample it contains, a device indicating and controlling temperature is mounted which works according to the ultrasonic principles. There are 2 figures.

ASSOCIATION: Leningrad Metallurgical Plant imeni Stalin (Leningradskiy metallurgicheskiy zavod im. Stalina).

AVAILABLE: Library of Congress

Card 2/2 1. Machines-Hardness testing

AUTHOR: Feygin, L. M. SOV/32-24-7-38/65

TITLE: A Machine for Testing Friction at High Temperatures (Mashina dlya ispytaniy na treniye pri vysokikh temperaturakh)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 7, pp. 869 - 870 (USSR)

ABSTRACT: In order to create conditions similar to wear the institute mentioned below constructed the machine MTT-1 which reproduces frictional processes at higher temperatures and at higher rubbing speed. A schematic representation of this machine is given, from which it may be seen that two motor drives are present, one for rotational velocities of from 2 to 8 m/sec., and the other for rubbing speed of from 8 to 50 m/sec. A number of springs makes it possible to apply stresses of from 10 to 100 kg. The machine has four measuring scales for the moment of friction, viz. 0 - 16, 0 - 32, 0 - 48 and 0 - 64 kgcm, as well as a drum for the plotting of diagrams with the coordinates moment of friction - time. A furnace in which the annular sample is located makes possible tests up to 700°. For tests of material from steam and gas turbines two varieties of

Card 1/2

A Machine for Testing Friction at High Temperatures SOV/32-24-7-38/65

determination were arranged with this machine. The results obtained are given in form of a graph for EI572 austenite steel rubbing on various non-ferrous metal alloys at 550°. The machine described may also be adapted to tests in various media at high and low temperatures. There are 2 figures.

ASSOCIATION: Leningradskiy metallicheskiy zavod im.Stalina (Leningrad Metal Working Plant imeni Stalin)

Card 2/2

FEYGIN, Lev Mikhaylovich; GRISHAYENKO, M.I., otv.red.; CHANTSEVA, G.M., tekhn.red.

[Guide for workers in hole boring] Pamiatka rabochego pri burenii shpurov. Izd.2., perer. Moskva, Ugletekhizdat, 1959. 122 p. (MIRA 12:9)

(Boring)

FEYGIN, L.M.

ALEKSANDROV, B.F., inzh.; BALYKOV, V.M., inzh.; BARANOVSKIY, F.I., inzh.; BOGUTSKIY, N.V., inzh.; BUN'KO, V.A., kand.tekhn.nauk, dotsent; VAVILOV, V.V., inzh.; VOLOTKOVSKIY, S.A., prof., doktor tekhn.nauk; GRIGOR'YEV, L.Ya., inzh.; GRIDIN, A.D., inzh.; ZARMAN, L.N., inzh.; KOVALEV, P.F., kand.tekhn.nauk; KUZNETSOV, B.A., kand.tekhn.nauk, dotsent; KUSNITSYN, G.I., inzh.; LATYSHEV, A.F., inzh.; LEYBOV, R.M., doktor tekhn.nauk, prof.; LEYTES, Z.M., inzh.; LISITSYN, A.A., inzh.; LOKHANIN, K.A., inzh.; LYUBIMOV, B.N., inzh.; MASHKEVICH, K.S., inzh.; MALKHAS'YAN, R.V.; MILOSERDIN, M.M., inzh.; MITNIK, V.B., kand.tekhn.nauk; MIKHEYEV, Yu.A., inzh.; PARAMONOV, V.I., inzh.; ROMANOVSKIY, Yu.G., inzh.; RUBINOVICH, Ye.Ye., inzh.; SAMOYLYUK, N.D., kand.tekhn.nauk; SMEKHOV, V.K., inzh.; SMOLDYREV, A.Ye., kand.tekhn.nauk; SNAGIN, V.T., inzh.; SNAGOVSKIY, Ye.S., kand.tekhn.nauk; FEYGIN, L.M., inzh.; FRENKEL', B.B., inzh.; FURMAN, A.A., inzh.; KHORIN, V.N., dotsent, kand.tekhn.nauk; CHERTVEROV, B.M., inzh.; CHUGUNIKHIN, S.I., inzh.; SHELKOVNIKOV, V.N., inzh.; SHIRYAYEV, B.M., inzh.; SHISHKIN, N.F., kand.tekhn.nauk; SHPIL'BERG, I.L., inzh.; SHORIN, V.G., dotsent, kand.tekhn.nauk; SHTOKMAN, I.G., doktor tekhn.nauk; SHURIS, N.A., inzh.; TERPIGOREV, A.M., glavnyy red.; TOPCHIYEV, A.V., otv.red.toma; LIVSHITS, I.I., zamestitel' otv.red.; ABRAMOV, V.I., red.; LADYGIN, A.M., red.; MOROZOV, R.N., red.; OZERNOY, M.I., red.; SPIVAKOVSKIY, A.O., red.; FAYBISOVICH, I.L., red.; ARKHANGEL'SKIY, A.S., inzh., red.;

(Continued on next card)

ALEKSANDROV, B.F.---(continued) Card 2.
BELYAYEV, V.S., inzh.; red.; BUKHANOVA, L.I., inzh., red.; VLASOV, V.M., inzh., red.; GLADILIN, L.V., prof.; doktor tekhn.nauk, red.; GREBTSOV, N.V., inzh., red.; GRECHISHKIN, F.G., inzh., red.; GONCHAREVICH, I.F., kand.tekhn.nauk, red.; GUDALOV, V.P., kand.tekhn. nauk, red.; IGNATOV, N.N., inzh., red.; LOMAKIN, S.M., dotsent, kand. tekhn.nauk, red.; MARTYNOV, M.V., dotsent, kand.tekhn.nauk, red.; POVOLOTSKIY, I.A., inzh., red.; SVETLICHNYY, P.L., inzh., red.; SAL'TSEVICH, L.A., kand.tekhn.nauk, red.; SPERANTOV, A.V., kand.tekhn. nauk, red.; SHETLER, G.A., inzh., red.; ABARBARCHUK, F.I., red.izd-va; PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

[Mining; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii spravochnik. Glav.red.A.M.Terpigorev. Chleny glav.redaktsii A.I. Baranov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.7. [Mining machinery] Gornye mashiny. Redkol.toma A.V.Topchiev i dr. 1959. 638 p. (Mining machinery) (MIRA 13:1)

18(3) SOV/127-59-4-1/27

AUTHOR: Feygin,L.M.,Chief Economist (Leningrad)

TITLE: The Iron Ore Base of the Ferrous Metallurgy in East Siberia. (Zhelezorudnaya baza chërnoy metallurgii Vostochnoy Sibiri.)

PERIODICAL: Gornyy zhurnal, 1959, Nr 4, pp 3-11 (USSR)

ABSTRACT: In conformity with the decision of the 21st Party Congress, a third metallurgical base is being created in Siberia. The Karaganda and West-Siberian Plants are being built, and the building of the Tayshetskiy zavod(Tayshet plant) will start in the next seven years. In East Siberia, the following regions of iron ore deposits can each serve as a base for the development of the metallurgical industry: 1) the Angara-Ilim region - with reserves of about 700 million tons of industrial ($A+B+C_1$) iron ore; 2) the Angara-Pit region - over 2 billion tons of ore with average 38% iron content; 3) the Transbaykalian region - also

Card 1/2

The Iron Ore Base of the Ferrous Industry in East Siberia.

with over 2 billion tons of reserves. No exploitation plans for the Transbaykalian region are yet made. Lines of communications (railways etc) have to be built first to make possible the exploitation of various ore deposits of the region. The author stresses that the vicinity of huge coal deposits of South Yakutiya, calculated in tens of billions of tons, makes the Transbaykal region especially favorable for the development of the metallurgical industry. Most of these deposits can be exploited by open cast mining during the first 10-15 years, later switching to underground mining. Detailed calculations of costs for mining and concentration processes were made by Giproruda, Mekhanobr and Gipromez. There are 4 tables and 3 Soviet references.

ASSOCIATION: Giproruda

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KOGAN, Kopel' Borisovich; TAMARIN, Iosif Iseyevich; FEYGIN, L.M., otv.red.; ABARBARCHUK, F.I., red.izd-va; SHKLYAR, S.Ya., tekhn.red.

[BVu boring machine] Burovoi stanok BVu. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 93 p. (MIRA 13:11)

(Boring machinery)

ALIMOV, Oleg Dmitriyevich; BASOV, Ivan Grigor'yevich; GORBUNOV, Valeriy Fedorovich; MALIKOV, Dmitriy Nikiforovich; FEYGIN, L.M., otv.red.; ABARBARCHUK, F.I., red.izd-va; SHKLYAR, S.Ya., tekhn.red.

[Boring machines] Buril'nye mashiny. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1960. 256 p. (MIRA 14:2)

(Boring machinery)

Feybush, L.M.

PHASE I BOOK EXPLOITATION SOV/4252

Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil

Chernaya metallurgiya (Ferrous Metallurgy) Moscow, Izd-vo AN SSSR, 1960.
275 p. (Series: Razvitiye proizvoditel'nykh sil Vostochnoy Sibiri)
Errata slip inserted. 2,000 copies printed.

Ed.: G.I. Lyudogovskiy, Candidate of Technical Sciences; Ed. of Publishing House: G.M. Makovskiy; Tech. Ed.: Ye.V. Makuni; Editorial Board of this vol.: S.S. Dvorin, N.V. Ovchininskiy, Candidate of Technical Sciences, A.N. Pokhvisnev, Doctor of Technical Sciences, and A.A. Fedotov, Engineer; Editorial Board of Series: I.P. Bardin,(Deceased), Academician, Academy of Sciences USSR (Chief. Ed.); M.A. Lavrent'yev, Academician, Academy of Sciences USSR; S.I. Vol'fkovich, Academician, Academy of Sciences USSR; V.I. Dikushin, Academician, Academy of Sciences USSR; V.S. Nemchinov, Academician, Academy of Sciences USSR; V.I. Veyts, Corresponding Member, Academy of Sciences USSR; O.D. Levitskiy, Corresponding Member, Academy of Sciences USSR; N.N. Nekrasov, Corresponding Member, Academy of Sciences USSR; L.B. Pustovalov, Corresponding Member, Academy of Sciences USSR; T.S. Khachaturov, Corresponding Member,

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Academy of Sciences USSR; N.F. Rostovtsev, Academician, All-Union Academy of Agricultural Sciense; A.N. Popov, Member, Academy of Building and Architecture USSR; L. Ye. Grafov, Deputy Chairman, State Planning Committee of the Council of Ministers RSFSR; A.D. Gashev, Member, State Planning Committee of the Council of Ministers RSFSR; A.Ye. Probst, Professor; V.F. Vasyutin, Professor; V.A. Krotov, Professor; P.V. Vasil'yev, Doctor of Economics; G.I. Lyudogovskiy, Candidate of Technical Sciences; P.A. Letunov, Candidate of Geology and Mineralogy; and M.G. Shkol'nikov, Candidate of Economics.

PURPOSE: This collection of papers is intended to furnish information on industrial resources in Eastern Siberia and to provide a basis for future developmental planning in the field of ferrous metallurgy.

COVERAGE: The collection is a summary of the proceedings of the Ferrous Metallurgy Section of the Joint Conference of Representatives of the Academy of Sciences USSR, the State Planning Commission, and the Council of Ministers RSFSR on the Development of the Industrial Resources of Eastern Siberia. The collection deals with four main areas of development in Eastern Siberia: 1) Mineral resources, 2) the fuel base, 3) prospects for the development of ferrous metallurgy, and 4) problems in the development of electrometallurgy. A list of the 112 members of

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the Section with their affiliations is given in the Appendix. References accompany several of the articles.

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FEYGIN, L.M.

Response to the article by N.S. Sindarovskii and A. G. Shpital'nikov, Concerning capital outlay in strip mining." Gor. Zhur. no.4:76-78 Ap '60. (MIRA 14:6)

1. Glavnyy ekonomist instituta Giproruda, Leningrad.
(Mining engineering--Costs)
(Sindarovskii, N.S.) (Shpital'nikov, A.G.)

26.2120

S/179/60/000/005/006/010
E191/E181

AUTHOR: Feygin, M.I. (Gor'kiy)

TITLE: On the Forced Vibrations of Two Masses Coupled Through a Clearance

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, No 5, pp 122-130

TEXT: Reference is made to the method of point mapping described in Russian literature including A.A. Andronov, A.A. Vitt and S.E. Khaykin, "Theory of Vibrations", (GIFML, 1959) and Yu.I. Neymark, "The Method of Point Mapping in the Theory of Vibration" (Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1958, Nos. 2, 5 and 6). The dynamics of a simple two-mass system is examined wherein the two masses are coupled with a clearance between them and therefore move with intermittent impacts under the action of an external harmonic force or a periodic sequence of impulses. The problem is a particular case of the impact damper but has also other applications. Considering first the harmonic force case, the equations of motion are formulated. One mass can slide inside the hollow space of the other and the force is applied

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On the Forced Vibrations of Two Masses Coupled Through a Clearance

to the external mass. Partially elastic impacts take place at the stops so that the reflected velocity is a given fraction of the impact velocity. The mapping in the phase plane is explained. It is shown that periodic motion of the system is possible only with a period which is a multiple of the period of the exciting force. The behaviour of the system is characterised by two parameters, namely, the impact velocity ratio and a non-dimensional measure of the clearance. It is shown that steady state conditions with one impact per half period exist when the period is an odd multiple of the exciting force period. In certain ranges of combinations of the parameters, two, three and more steady state conditions exist. When the impact of the masses is entirely inelastic, an arbitrary number of complex steady state conditions exists wherein sliding motion is included. The simplest periodic condition under harmonic force excitation had previously been examined by R.E. Brunshteyn and A.Ye. Kobrinskiy (Ref 7).

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On the Forced Vibrations of Two Masses Coupled Through a Clearance

The discrepancies between the two analytical treatments are discussed. When the system is subject to a periodic sequence of impulses, steady state conditions can exist which are characterised by two integers. The first integer is equal to the ratio of the periods of the motion and of the exciting impulses, and the second integer is half the number of impacts per period of motion.
There are 7 figures and 7 Soviet references.

SUBMITTED: July 10, 1959

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FEYGIN, L.M.

Portable apparatus for determining the hardness of large parts by impression with a diamond pyramid. Zav.lab. 26 no.2:233-235 '60. (MIRA 13:5)

1. Leningradskiy metallicheskiy zavod imeni Stalina.
(Hardness)

MESHCHERYAKOV, Aleksey Il'ich; FEYGIN, L.M., otv. red.; ABARBARCHUK, F.I., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Crosscutting and boring machines and the tool] Sbochno-burovye mashiny i instrument. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1961. 76 p. (MIRA 14:11)
(Boring machinery)

FREY, V.I.; YEFIMOV, M.V.; FEYGIN, L.M.; MININA, K.G.; MALYSHEV, I.I., retsenzent; SKOBNIKOV, M.L., retsenzent; BRAUN, G.A., retsenzent; BRAUN, G.A., retsenzent; KHRUSHCHOV, N.A., retsenzent; GRISHINA, T.B., red.izd-va; IYERUSALIMSKAYA, Ye., tekhn. red.

[Comparative evaluation of iron-ore deposits based on the results of a preliminary prospecting] Sravnitel'naia otsenka zhelezorudnykh mestorozhdenii po rezul'tatam predvaritel'noi razvedki. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 153 p. (MIRA 14:11)

(Iron ores)

KAL'NITSKIY, Yakov Borisovich, kand. tekhn. nauk; ABRAMSON, Khanan Isaakovich, inzh.; RODIONOV, Georgiy Viktorovich, doktor tekhn. nauk; ARKHANGEL'SKIY, A.S., kand. tekhn. nauk, retsenzent; FEYGIN, L.M., otv. red.; FROLOVA, Ye.I., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Underground mechanical loading] Podzemnaia mekhanizirovannaia pogruzka. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 196 p. (MIRA 15:3)
(Mining machinery) (Loading and unloading)